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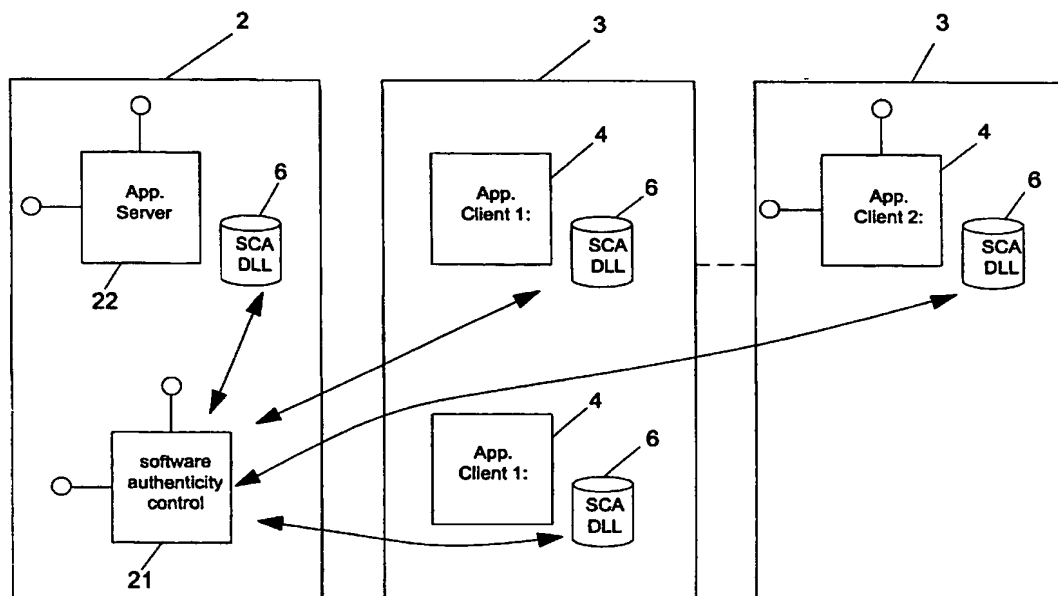
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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR CONTROLLING AN ELECTRONIC INSTRUMENT FOR METROLOGICAL MEASUREMENTS



(57) Abstract: Control system of an electronic instrument for metrological measurements, comprising an electronic local processing unit including a handling application of said instrument. The system includes a control application for said handling application, which can be associated with said local processing unit, said control application being suitable for generating a univocal certification code for the application.



SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/12826

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G01F25/00 G06F25/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01F G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 342 453 A (ABB INSTRUMENTATION LTD) 12 April 2000 (2000-04-12)	1,8
Y	abstract page 9 - page 10, paragraph 1; figure 1 page 11, line 9 - line 14	2
Y	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 01, 28 February 1995 (1995-02-28) & JP 06 300603 A (RICOH SEIKI CO LTD), 28 October 1994 (1994-10-28)	2
A	abstract	1,8
X	EP 0 736 484 A (RYAN MICHAEL C) 9 October 1996 (1996-10-09)	1,8
A	abstract; figures 1,6,7 column 7, paragraph 2 column 14, paragraph 1	2

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/12826

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1,2,8

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1,2,8

Control system and method for an electronic instrument for metrological measurements using a univocal metrological certification code wherein time stamps and bar codes are associated and printed with those codes so that the time of the validation can be established and easily read by simple optical means.

2. claim: 3

Control system for an electronic instrument for metrological measurements using a univocal metrological certification code wherein the control system is connected to a local station over a telecommunication network whereby the certification code can be obtained at a distance.

3. claims: 4-6

Control system for an electronic instrument for metrological measurements using a univocal metrological certification code wherein applications use a dynamic library whereby the software can be maintained more easily and several applications share at least part of the memory resulting in lesser memory requirements.

4. claims: 7,9

Control system and method for an electronic instrument for metrological measurements using a univocal metrological certification code wherein the certification code is cryptographically treated whereby unauthorised observers may not interpret the certification.

5. claim: 10

Control method for an electronic instrument for metrological measurements using a univocal metrological certification code wherein a authenticity certificate of a handling application is received whereby it is possible to verify the source of the information.

6. claim: 11

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Control method for an electronic instrument for metrological measurements using a univocal metrological certification code wherein the receipt of information is acknowledged by a code whereby the transmitting side knows that the the local station has received the information and does not require retransmission.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/12826

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2342453	A	12-04-2000	AU 767192 B2	06-11-2003
			AU 5355299 A	13-04-2000
JP 06300603	A	28-10-1994	NONE	
EP 0736484	A	09-10-1996	EP 1398293 A2	17-03-2004
			EP 0736484 A2	09-10-1996
			US 5913180 A	15-06-1999